



Research Synthesis

Infant Mental Health and Early Care and Education Providers

This synthesis has been developed to answer some of the most frequently asked questions that early childhood providers have about Infant Mental Health (IMH) - early social and emotional development - and the IMH system. It also provides information about where to turn for additional information for promoting IMH when children and families are experiencing challenges. The synthesis will address:

- The definition of IMH
- Why it is important that early childhood providers know about IMH
- Approaches to promoting IMH
- Prevention of IMH challenges
- Focused intervention with children and families at risk
- More intense/tertiary interventions

What is infant mental health?

Infant mental health (IMH) is synonymous with healthy social and emotional development. The terms are used interchangeably throughout this document.

IMH is the developing capacity of the child from birth to 3 to experience, regulate (manage), and express emotions; form close and secure interpersonal relationships; and explore and master the environment and learn - all in the context of family, community, and cultural expectations for young children.

- **Developing capacity** is a reminder of the extraordinarily rapid pace of growth and change in the first 3 years of life.
- Infants and toddlers depend heavily on adults to help them **experience, regulate, and express emotions**.
- Through **close, secure interpersonal relationships** with

parents and other caregivers, infants and toddlers learn what people expect of them and what they can expect of other people.

- The drive to **explore and master one's environment** is inborn in humans. Infants' and toddlers' active participation in their own learning and development is an important aspect of their mental health.
- The contexts of **family and community** are where infants and toddlers learn to share and communicate their feelings and experiences with significant caregivers and other children. A developing sense of themselves as competent, effective, and valued individuals is an important aspect of IMH.



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- **Culture** influences every aspect of human development, including how IMH is understood, adults' goals and expectations for young children's development, and the child rearing practices used by parents and caregivers (ZERO TO THREE Infant Mental Health Task Force, 2001).

Essentially, infant mental health focuses on the optimal social and emotional development of infants and toddlers within the context of secure, stable relationships with caregivers (Zeanah & Zeanah, 2001).

These caregivers include the child's birth parents, adoptive parents, foster parents, grandparents, and child care and education providers as well as other significant adults who share the primary care and nurturance of infants and toddlers (Weatherston & Tableman, 2002). IMH, then, has its roots in the understanding that early development is the product of the infant's characteristics, caregiver-infant relationships, and the environment within which these relationships unfold. All of these factors influence an infant's mental health.

The term infant mental health is also used to describe a field of study and practice (Heffron, 2000) and a system of

- **prevention of social and emotional challenges**
- **promotion of social and emotional health, and**
- **treatment to support a return to social and emotional health (Zeanah, Stafford, Nagle, & Rice, 2005).**

In addition to a focus on the child's social emotional development, the term infant mental health is also

used to describe a field of study and practice that has grown during the last three decades into a broad-based, multidisciplinary, and international effort to enhance the social and emotional well-being of very young children (Heffron, 2000).

We know that infants and toddlers experience the full spectrum of social emotional functioning ranging from development that seems to be on track (e.g. the ability to form satisfying relationships with others, play, communicate, learn, and experience a range of human emotions) to social emotional disorders. Therefore, researchers from a wide variety of disciplines have engaged in research and clinical study to build our knowledge about infant development, caregiver-infant relationships, and environmental influences on children's emotional development (Fitzgerald & Barton, 2000). The disciplines of child development, psychiatry, social work, psychology, health, special education and others involved in assessing and treating young children, in both mental health and health care settings, are core disciplines in IMH. Early care and education, early intervention and child welfare play an important role as well. Each discipline has a unique perspective through which it views infants and their development and each takes on both unique and overlapping roles in supporting social emotional development (Zeanah & Zeanah, 2000).

Another way for providers to think about infant mental health is to think about the range of care, education, and family support that are offered to very young children (Zeanah, Stafford, Nagle, & Rice, 2005) depending on how they seem to be getting along (Zeanah, Stafford, & Zeanah, 2005). The levels of care that we discuss in this paper are promotion and prevention, focused intervention, and tertiary (more intense services):

Promotion and Prevention - encouraging good mental health and social emotional wellness

Early childhood care and education programs that include family support can be effective in the *promotion* of infant mental health and prevention of IMH challenges (Zeanah, et al. 2005). We know that infants and toddlers experience typical developmental challenges: separation anxiety, stranger anxiety, autonomy issues, management of their emotions, toilet learning, peer conflict, and many more. While working with families, early care and education providers make emotional and resource support available for the child and family to promote infant and toddler well-being.

Early childhood programs such as Early Head Start and child care in both centers and homes play an important role in the promotion of infant mental health. In addition, home visiting programs and health-related programs such as Women, Infants, & Children (WIC) and well-child visits can emphasize the importance of 1) supporting the parent-child relationship; 2) understanding typical child development and each child's unique temperament; 3) learning positive behavior support strategies; and 4) working to reduce family stress in order to help promote children's mental health of children.

Focused Intervention - preventing the occurrence or escalation of mental health problems and minimizing children's social emotional developmental risk (usually a family-centered process)

Children and families may be at risk for experiencing challenges to their mental health (Sameroff, Bartko, Baldwin, Baldwin & Seifer, 1998; Sameroff & Fiese, 2000). Caregivers in families may experience chronic illness, homelessness, hospitalization, stress, a history of abuse, attachment challenges, short- and long-term depression, and psychological vulnerability (Conroy & Marks, 2003). "Biological factors affecting the child—such as prematurity, low birth weight, disability, and difficulties in

sensory processing and regulation - may also present obstacles to healthy emotional development. The cumulative impact of multiple risk factors poses a potent threat to infants' and families' mental health" (Chazan-Cohen, Jerald, & Stark, 2001, p. 7). Zeanah et al. (2005) report on the outcomes of a number of evidenced-based intervention programs.

Focused intervention includes providers collaborating with families to assess and employ strategies to support children with challenging behaviors. Early Head Start and Child Care programs may provide training to prepare early care and education providers to offer these types of programs. Other programs may employ social workers or mental health consultants to provide focused intervention.

Intensive Intervention/Treatment - More intense services and supports to help address mental health needs early and provide *intensive* services to support a return to positive developmental progress (usually a family-centered process)

Infants, toddlers, and their families may face very challenging circumstances and experience traumatic events—child abuse, post traumatic stress disorder, violence, ongoing attachment challenges, depression, and health problems - that contribute to mental health concerns and that require more focused intervention with a mental health professional. "Infant mental health is concerned with risk factors that relate to ...serious psychiatric disorders that cause suffering and developmental compromises" (Zeanah & Zeanah, 2001, p.16). Infant and toddler care and education providers will want to partner with community services to provide the more intensive services and supports that children and families and children need, whether within the program or in the community.

Why is it important for Early childhood Providers to know about Infant Mental Health?

Early care and education programs have unique opportunities to promote infant mental health. From the way teachers interact with infants during feeding and diapering to the way they engage parents in the care of their child, early care and education programs are continuously building and nurturing relationships which support the social emotional development of infants and their primary caregivers (Chazan-Cohen, Jerald, & Stark, 2001, p. 7)

- Early childhood providers share with families the important responsibility of promoting and safeguarding the early social emotional development of infants and toddlers.
- The relationship between a child and his/her family will have an impact for the remainder of that child's life.
- Collaborating with families, supporting families, reducing family stress, and providing child development information through home visits and family support programs will promote families' understanding of the importance of early social emotional development. Supporting families will help to prevent child abuse and neglect, maternal depression, attachment challenges, and traumatic events.
- Understanding early social emotional development will enable a provider to enhance her relationships with infants and toddlers in her care.
- Early childhood providers are in a crucial position to be able to identify signs of problems for infants and toddlers who may need more intensive services to support their development.

Why are nurturing and responsive relationships so critical for infants and toddlers?

A secure and responsive relationship between the infant or toddler and his or her primary caregivers is the foundation of mental health in the earliest years and the context in which healthy social and emotional development continues to flourish (Chazan-Cohen, Jerald, & Stark, 2001, p. 7)

RELATIONSHIP EXPERIENCES IN THE EARLY YEARS LAY THE FOUNDATION FOR DEVELOPMENT

The early years of life lay the foundation for a child's lifelong development. From the time of conception to the first day of kindergarten, development proceeds at a pace exceeding that of any subsequent stage of life (National Research Council and Institute of Medicine, 2000). It is during this time that the brain undergoes its most dramatic growth, and children acquire the ability to think, speak, learn and reason. Early experiences, including early relationships, can and do influence the physical architecture of the brain, literally shaping the neural connections in the infant's developing brain (National Scientific Council on the Developing Child, 2005). Research shows that supportive relationships have a tangible, long-term influence on children's healthy development, contributing to optimal cognitive and social emotional development for infants and toddlers (Zeanah, 2001).

ATTACHMENT RELATIONSHIPS IMPACT SOCIAL AND EMOTIONAL DEVELOPMENT

Those who study the science of early emotional development have concentrated much attention on the quality of infants' first relationships. In the earlier definition of infant mental health, "the capacity to form close and secure interpersonal relationships"

refers to the very important developmental concept of attachment. Attachment is a term used to describe the emotional bond that develops over time as the infant and primary caregiver interact (Bowlby, 1969, 1982). Researchers describe the infant as biologically inclined to use the caregiver as a provider of safety, creating a “secure base” for the infant.

For example, a crying infant, frightened by unusual noise, may calm immediately when picked up by a familiar caregiver. The adult is the infant’s secure base. Through repeated moments of responsive and sensitive care, infants learn to trust caregivers (Egeland & Erickson, 1999). With the ability to predict that they will be safeguarded, typically developing emotionally healthy infants and toddlers explore their surroundings but seek out that special person - their secure base - at times of threat –danger, illness, exhaustion, or following a separation. When the fear of danger is over, the need to return to the secure base will decrease, but only if the infant can count on the person being there if needed. When infants or toddlers feel secure, they are able to turn their attention to other tasks like learning how to use the climbing equipment or how to get along with other children (Holmes, 1993). When infants and toddlers have this support, they also can learn how to empathize with and to act with compassion toward others.

NURTURING AND RESPONSIVE RELATIONSHIPS FOSTER POSITIVE SOCIAL EMOTIONAL DEVELOPMENT

The caregiving relationship is the major influence on the learning and growth that takes place during the early years. Caregivers, including early childhood providers, engage in interactions that form the infant’s first relationships that, in turn, serve as models for all future relationships. They are crucial for the development of trust, empathy, compassion, generosity, and conscience.

Relationships developed during infancy and toddlerhood provide the context for supporting the development of curiosity, self-direction, persistence, cooperation, caring and conflict resolution skills (Lieberman, 1993; Greenough, et. al., 2001) - all important skills in the development of school readiness (Kaplan-Sanoff, 2000). As a child matures, supportive relationships with parents and other caregivers who are sensitive to the individual needs of that particular child shape the child’s self-image. A strong, positive internal image provides the young child with the resilience needed to face life’s challenges.

Another facet of the attachment relationship is the central role it plays in the regulation and management of emotions (Cassidy, 1994; Volling, 2001; Egeland & Bosquet, 2001). Because they are not able to independently manage or easily control their own emotions, young children need the assistance of a primary caregiver. At birth, infants have the capacity to express distress through crying and other means that are signals for the caregiver to respond. An attentive caregiver’s response to these signals keeps the infant’s distress within reasonable limits. The infant can then experience relief from overwhelming emotion as caregivers offer help and support (Egeland & Erikson, 1999).

Supportive early emotional experiences put the infant on a positive pathway toward school readiness. When children enter school, they must have achieved the emotional and behavioral self-regulation that will allow them to approach the world with confidence, curiosity, and intentionality. To be successful in school they must also have the capacity to communicate and cooperate with others (National Research Council and Institute of Medicine, 2000).

FAMILY-CHILD AND PROVIDER-CHILD INTERACTIONS LEAD TO HEALTHY SOCIAL EMOTIONAL DEVELOPMENT

The following is a list adapted from the National Research Council and Institute of Medicine (2000) that identifies some of the interactions that characterize supportive and nurturing relationships between parent and child or between early childhood provider and child:

- Responsive care that contributes to the child’s developing self-confidence
- Affection and nurturing that builds the child’s developing self-esteem
- Protection from harm and threats of which they may be unaware
- Opportunities to experience and resolve human conflict cooperatively
- Support to explore and develop new skills and capabilities
- Exchanges through which children learn the give-and-take of satisfying relationships with others
- The experience of being respected and of respecting others

NURTURING RESPONSIVE RELATIONSHIPS – HOW TO PUT RESEARCH INTO PRACTICE:

- To the extent possible, provide consistent long-term stable relationships between early childhood providers and infants and toddlers as well as between providers and parents. Consider assigning primary caregivers who take the lead in the care of specific infants and toddlers.
- Use a continuity of care model where caregivers remain with infants and toddlers from infancy to the late toddler years.
- Initiate practices where staff regularly talk with each other and reflect on how to best provide sensitive, responsive care.
- Provide appropriate provider/child ratios and small group sizes to ensure responsive relationships.
- Engage in professional development opportunities to learn more about the importance of relationships and responsive practice.

Why is it necessary to support and collaborate with the family when promoting children's social and emotional development and preventing social emotional challenges?

THE FAMILY IS THE PRIMARY INFLUENCE ON SOCIAL EMOTIONAL DEVELOPMENT

Infants and toddlers depend on their parents and other caregivers to provide the primary foundation for development. Efforts by a provider to communicate and develop relationships with each child's family demonstrate respect for and an understanding of the family's key role in shaping children's fundamental learning about themselves, their emotions and their way of interacting and relating to others (National Research Council and Institute of Medicine, 2000).

PARENTING IS LARGELY INFLUENCED BY HOW ONE WAS PARENTED

Providing sensitive, responsive and consistent parenting is challenging work. Each child's family has its own composition and history, its own strengths and its own ways of coping with stress and adversity. The varying degrees of knowledge, confidence, excitement, anxiety, and sensitivity that mothers and fathers bring to parenting are powerfully influenced by their relationships with their own mothers and fathers (van IJzendoorn, 1995). Providers in early childhood systems must be sensitive to the vast range of life and cultural experiences that parents bring to the job of parenting.

CONNECTION WITH FAMILY AND FRIENDS SUPPORTS PARENTING

Parents' ability to support their children's social emotional development also is affected by the degree to which they are in regular contact with extended family and friends as well as by the extent to which this network is able to provide practical help and emotional support.

Parents who receive strong support from family and significant friends have better resources with which to respond to their infant's social emotional needs. Those who are cut off, for whatever reason, from sources of emotional support and hands-on help may find that their isolation contributes to their stress level and makes meeting their infant's needs difficult or overwhelming. Early childhood systems that serve infants and toddlers and their families have the opportunity to positively contribute to a family's social support network and to reduce the level of stress families may experience (Seibel, Britt, Gillespie, and Parlakian, 2006; Gowen & Nebrig, 2002).

STRESS AND A FAMILY'S CAPACITY TO ADAPT TO STRESS AFFECT PARENTING

Another major influence on an infant's or toddler's mental health is the general level of stress a family experiences and the family's capacity to adapt to that stress. Ideally, families are able to meet individual members' social, emotional, and physical needs - even during periods of change and upheaval (and the period surrounding the birth of a child is a period of stress and change for all families!) When there is additional stress from environmental circumstances such as poverty, poor housing, or community violence, or when there are genetic or constitutional factors that make caring for a infant particularly challenging, such as prematurity, developmental disabilities, or special health care needs, parents' capacity to provide their infant or toddler with consistent, sensitive, responsive care may be adversely impacted.

AN INFANT'S UNIQUE CHARACTERISTICS INFLUENCE THE PARENTING RELATIONSHIP

Infants and toddlers, as young as they are, exert a strong influence on relationships in the family system. Infants come into the world with their own style of reacting to and participating in the world around them. Each infant's inborn capacity to

adapt to the world outside the womb affects the interactions that the infant experiences with parents and primary caregivers as well as the quality of these growing relationships. The needs and demands of a particular infant will be viewed through the lens of the family's unique history and culture. One family may experience a child characteristic (e.g. shyness) as difficult, while another family may experience the same characteristic as endearing. Parents and providers will want to observe and discuss the children's unique characteristics and their influence on them.

CULTURE HAS A STRONG IMPACT ON PARENTING

One of the most challenging dimensions of providing high quality care in early childhood systems is the need to be attuned to and supportive of the increasing cultural diversity of children and families served. Culture, which influences every aspect of human development and is one of the most powerful influences on social emotional development, is made up of the shared beliefs, values, and goals of a group of people (Kalyanpur & Harry, 1999). It involves an integrated pattern of behavior that includes thoughts, communications, practices, beliefs, values, customs, ways of interacting, roles, and expected behaviors of an ethnic, racial, religious, or social group (Cross, Bazron, Dennis, & Isaacs in Day & Parlakian, 2004). Culture is transmitted through succeeding generations and is dynamic. The effect of culture on family functioning is reflected in child-rearing practices, family roles, perceptions about supports and stressors, views about normal development, and the meaning attributed to children's behavior. One of the most frequently studied aspects of cultural values is the way in which family members think about and emphasize independence or interdependence. When providers understand cultural differences that influence the ways parents promote

dependence or independence, they will understand why one child may stay near them much of the time while another child plays independently with toys most of the time.

In order to support the social emotional development of infants and toddlers and their relationships with their families, it is important for early childhood providers to try to understand what meaning a family assigns to the expression of a particular emotion or behavior. For example, a family may believe that when an infant cries, she should be immediately picked up and responded to. Another family may believe that the infant should have a little time to work through her emotions prior to being picked up. Differences in such child rearing beliefs and practices can create tension and confusion when they are not discussed openly and sensitively (Pawl & Dombro, 2001).

CULTURE INFLUENCES COMMUNICATION AND THE EXPRESSION OF EMOTION

One major characteristic of culture is communication style. Findings from cross-cultural research suggest that basic human emotions are universal (Ekman, 1994 in Trawick-Smith, 2003). Broadly speaking, emotions such as fear, anger, and happiness are part of human interactions in all cultural groups. Variations emerge in the way that they are expressed or communicated. Beginning from birth, children learn appropriate ways of expressing emotion based on cultural and family norms. Emotional expressions that tend to vary across cultures are animation, intensity of emotional expression, volume (loudness) of speech, directness of questions, directness of eye contact, touching, use of gestures, and physical proximity/distance or zone of personal space with which people feel comfortable (Day & Parlakian, 2004). Relationships and communication will be more likely to flourish when providers observe and understand cultural difference in children's and

families' communication style and expression of emotion.

RESPECT AND EMPATHY INFLUENCE PARENTAL FUNCTIONING

When parents feel that their own concerns are accepted and respected and when efforts are made to understand their perspective and meet their needs, they are more capable of doing the same for their children (Parlakian & Seibel, 2002). When providers seek to build the parent's competence and confidence with respect and empathy and the parent feels secure in relationships with providers, the parent's investment, enjoyment, and commitment in the relationship with the child will be enhanced.

TAKING THE CHILD'S FAMILY INTO CONSIDERATION—HOW TO PUT RESEARCH INTO PRACTICE:

- Develop a family-provider partnership to create responsive programs that meet the family's needs, priorities, and concerns. Families must be actively involved in the planning, implementation, and monitoring of the services being offered (Cornwell & Korteland, 1997). When early childhood providers value and support family members, they model strategies for parents to value and support their children.
- Recognize the family's major influence on infants' and toddlers' social emotional development. Families exert an enormous impact on development throughout the life span through their interactions, their guidance strategies, their provision of comfort, understanding of typical development, and the quality of attachment between them and their children,
- Take steps to learn about the family's relationships, history, stress level, capacity to adapt to stress, the individual characteristics of the infant or toddler, and the family's unique culture.

- Be willing to adapt care practices to support the nurturing efforts of the family by, for example, holding or carrying an infant more frequently if that is the parent's preference.
- Identify and respect the strengths of individual family members and the family as a whole.
- Focus simultaneously on the emotional needs of parents and family members as well as the emotional needs of the infant or toddler.
- Seek frequent feedback from families on their perspectives in order to continually reassess the appropriateness of the caregiving environment being provided.

What knowledge and skills are most important when promoting infant mental health?

INFANT AND TODDLER PROVIDERS NEED SPECIALIZED SKILLS

All early childhood providers who work with infants, toddlers, and their families need specialized knowledge and skills to address the unique developmental needs of children birth to three and their families (Fenichel & Eggbeer, 1990; Michigan Association for Infant Mental Health, 2002). Both the excitement and challenge of working with this population stem from the fact that all areas of development are interconnected. Because all areas of development are linked, understanding development is a complex task. There are also many interconnections between infants and their caregivers, between the family and the community, and among parents and the array of professionals concerned with very young children and their families.

The following is a list of skills that are critical to competent services to infants and their families, whether they are provided in center or home-based child care, Early Head Start, or home-based settings:

- **Observing** – carefully watching behavior and communication in a

variety of activities with adults and peers over the course of a day; noticing behavior, rituals and daily give-and-take in the parent-child relationship

- **Listening** – tuning in to parents as they share, verbally and in body language, their thoughts, feelings and reactions
- **Reflecting** - on the meaning of behaviors, experiences, and communications from or about the infant
- **Building self-awareness** – reflecting on one's own reactions, thoughts and feelings to learn how to be emotionally present and responsive without becoming emotionally involved
- **Seeking collaboration and supervision** - both within and across disciplines with colleagues and mentors to extend one's knowledge and have a safe place to examine both positive and negative feelings aroused by working with infants and families
- **Mastering important knowledge and skills** - studying, asking questions, and reflecting on the child, the parent(s), the parent-child relationship, the child's family, and the community in which the child and family live (Fenichel & Eggbeer, 1990; Gilkerson & Shahmoon-Shanok, 2000).

INFANT AND TODDLER PROVIDERS NEED TO MASTER A CORE KNOWLEDGE BASE

The daily activities of early childhood providers working with infants and toddlers may vary but there are a set of core concepts which underlie all sound practice with children and families in the first three years of life. These concepts help to organize what is known about infants and families and suggest what is yet to be discovered or understood. The core concepts include:

- Genetic and environmental factors work together to influence development
- Healthy infants are born prepared to form warm emotional relationships

- Enduring responsive relationships are critical for development
- Parenthood is a developmental process

Providers often wish to “be everything” to the infant and family (for beginning practitioners this is often expressed as the feeling that mastery of some specific new technique would make them infinitely more effective). This desire to be an expert collides with the realization that knowing one's limits and seeking to learn from and collaborate with other professionals and with parents are true signs of competence. The more one learns about any aspect of the development of infants and toddlers, the more one realizes how much more there is to know.

REFLECTIVE SUPERVISION SUPPORTS COMPETENCE IN INFANT AND TODDLER PROVIDERS

In addition to ongoing training, infant and toddler providers will benefit from receiving reflective supervision. Work with, and within, relationships requires opportunities for stepping back and reflecting on what is happening. Reflective supervision is the heart of reflective practice. It takes place between a supervisor and a supervisee and is characterized by active listening and thoughtful questioning by both parties. It happens on a regular schedule and can be done with individuals or groups, by supervisors or by peers (Gilkerson & Shahmoon-Shanok, 2000). While not easy to put into place in early childhood settings, it can provide essential support for quality services.

ENSURING THAT EARLY CHILDHOOD PROVIDERS WHO WORK WITH INFANTS AND TODDLERS HAVE THE NECESSARY KNOWLEDGE AND SKILLS - HOW TO PUT THE RESEARCH INTO PRACTICE:

Seek to learn the specialized knowledge and skills unique to the emotional and social needs of infants and toddlers (and their families) in the first three years of life.

- Make sure there are opportunities for reflective supervision to increase caregivers' competence and capacity to think through a situation, consider different approaches, observe carefully to figure out which approach might work best, try something and then evaluate whether it works - all the while being able to describe what is being done and for what reasons.
- Support infant and toddler providers' competence by ensuring that they also have the opportunity to discuss issues or concerns with parents and with peers.

What are some of the things that caregivers should consider when trying to understand child behavior that might be considered challenging?

INFANT AND TODDLER BEHAVIOR HAS MEANING

Infants and toddlers develop expectations about relationships through their everyday interactions with important adults. All children want to feel protected, cared for, understood, and loved. In the absence of disabilities or serious health care issues, very young children whose needs are met will achieve important developmental milestones in all domains of development. However, if their needs are not met, development likely will be adversely impacted. When their social and emotional needs are not met, infants and toddlers may struggle with ways to return to a feeling of well being. This struggle and their attempts to communicate their distress may result in behavior that is challenging for caregivers. In other words, all behavior has meaning as children try to communicate what they are feeling. It is the provider's job to interpret what they are “saying.”

There are infants and toddlers who have personal histories that provide less than positive lessons about their world and about relationships. Some children have learned that their needs will not always be met. Some have learned that

their needs may not be met in a loving or nurturing way. A child's internal struggle or feelings of distress, his efforts to cope, may show as behaviors that are difficult for caregivers to accept or manage. The child's inability to communicate or ask for what is needed may be a consequence of age, of the child's having had little success in getting his needs attended to, or of some undiagnosed physical problem (e.g. trouble hearing or problems with regulating different systems in his body). A child might pull away from an interaction to insure his own safety. Another may strike out because he believes that he must fend for himself. The intensity of challenge that these behaviors present to caregivers is evidence of how intensely these very young children will strive to communicate their emotional needs.

CAREGIVERS DEFINE CHALLENGING BEHAVIOR

"Challenging behavior" for an infant or toddler can be defined as any behavior that feels overwhelming to and that challenges a provider's, child's, or family's sense of competence (Early Head Start National Resource Center, 2006; Wittmer & Petersen, 2006). It is important to point out that behavior that is of concern to one caregiver may not affect another in the same way or to the same degree, depending on the internal response of the caregiver, his or her own childhood and parenting experiences, and prior experiences with a variety of young children.

Challenging patterns of behavior may have many causes including those associated with the infant's genetic constitution, with relationships the infant has, or with the physical environment in which care is provided. The cause of the behavior may not be fully understood by any of the child's caregivers. Yet the reality of the child's need for sensitive and responsive care requires that both parents and providers cooperatively develop strategies for understanding and managing the behavior.

VERY YOUNG CHILDREN LEARN CULTURALLY ACCEPTABLE BEHAVIORS

Children are born prepared to learn and they do learn a great deal in an incredibly short amount of time. They learn when it is appropriate to eat with fingers and when it is appropriate to use spoons; when it is appropriate to wear clothing and when it is appropriate to wear pajamas. They learn all the rules of the family and culture in which they live. They learn that toys are shared, but not toothbrushes; it is acceptable to laugh at some things, but not at others; sometimes adults tease and sometimes they are serious. Infants and toddlers learn what behavior is expected of them through their relationships with family members and other caregivers. They learn all of this as vulnerable, dependent, and curious creatures who both strive for an emotional connection with those that care for them and strive to master their physical environment (National Research Council and Institute of Medicine, 2000).

At their most effective, adults are able both to support the complete dependency of the newborn and increasingly respect and support the growing autonomy of the toddler. Toddlers are constantly watching the people they trust to help them learn how they should behave. They see how adults treat one another and other children to figure out how they will act. They constantly assess adults' reactions to them for messages about love and their own worth. For infants and toddlers, getting no response at all to their actions may send the message that they are not worth being cared for. The deeper the adult's understanding of patterns of typical development, the easier it will be to respond with sensitivity and consistency (Lerner & Dombro, 2005).

CHALLENGING BEHAVIORS ARE OFTEN ASSOCIATED WITH ACTING OUT OR SOCIAL WITHDRAWAL

The characteristics or patterns of behavior that early childhood providers find difficult to respond to are often

related to the perception that the behaviors are of greater frequency, intensity and duration than that of a "normal" or "typical" child. Two categories of challenging behaviors are often identified by parents and caregivers: acting out or aggressive behaviors and social withdrawal behaviors. Acting out behaviors may include: inconsolable crying, fussing, frequent tantrums, pushing, hitting, biting other children, frequently throwing things or knocking things down, destroying materials, and frequently refusing to participate in play or routine activities. Social withdrawal behaviors include pulling away while being held, rarely cooing, babbling or talking, looking sad, not showing a preference for the caregiver, not making eye contact, whining, being overly compliant or avoidant with the caregiver, not using communication skills that have been previously used, and difficulties with sleeping and eating (Kelly, Zuckerman, Sandoval & Buchman, 2003).

TEMPERAMENT HAS AN IMPACT ON BEHAVIOR

It is important to understand the impact of inborn, biological differences on the behavior of individual children. Each infant is born with a personal style, a typical way of approaching or reacting to the world (Chess & Thomas, 1996). Learning about temperament can help providers understand more about these inborn traits that play a major role in each child's pattern of behavior and may eventually have a major influence on self esteem. Temperament does not predetermine behavior nor is it an "excuse" for behavior. However, being alert to and knowledgeable about temperament traits can help adults not only understand why children react to events differently but also provide help in knowing what kind of individualized support the child could benefit from.

In literature on the relationship between social emotional development and school readiness, an easy

temperament and personality are considered protective factors for school success. Conversely, a difficult temperament and personality are considered to be risk factors for poor school performance (Huffman, Mehlinger, & Kkerivan, 2000). Positive parent and provider practices with very young children of all temperament types may help those children, regardless of temperament, avoid developing behavior patterns that progress to poor relationships with peers and teachers at school.

One framework for understanding temperament identifies nine traits that appear to be biologically based, remain fairly constant over time, and affect a child's reactions to other people and the environment (Thomas, Chess, Birch, Hertzog & Korn, 1963). Together, these nine traits are considered key components of the child's temperament:

- **Activity level:** natural, child-initiated amount of physical movement
- **Biological rhythms:** regularity of child's eating, sleeping, and elimination patterns
- **Approach and withdrawal:** child's initial reactions to a new situation
- **Mood:** prevalence of calm, cheerful interest or sadness or irritability
- **Intensity of reaction:** energy level or vitality of emotional expressions
- **Sensitivity:** level of response to sensory experiences such as light, sound, textures, smells, tastes
- **Adaptability:** the child's ease in adjusting to changes in routines or in recovering from being upset
- **Distractibility:** how easily the child's attention is diverted from his previous focus
- **Persistence:** how well a child can stay with an activity that becomes somewhat frustrating

THE CAREGIVER'S TEMPERAMENT IS IMPORTANT AS WELL

An infant's temperament influences behavior and may have a major impact on evolving

relationships with caregivers (Olson, Bates & Sandy, 2003; Chess & Thomas, 1996). The compatibility between the temperament traits of a child and the temperament traits of a provider or parent may influence the adults' reactions to a particular child and expectations for that child's behavior. For example, a caregiver with an intense, active and adaptable temperament may need to reduce the volume of her voice, provide additional quiet activities, and provide warnings for transitions for an infant or toddler who is less intense, less active and may have trouble adapting to new situations or experiences. The ability of the caregiver to be flexible, to adapt responses to the temperament of an individual child is key to the probability that a child will receive sensitive, responsive care. In addition, caregivers who understand the influence of a particular child's temperament on their own emotional reactions to that child are more able to thoughtfully modify their responses (Early Head Start National Resource Center, 2006).

CAREGIVERS NEED KNOWLEDGE OF CHILD DEVELOPMENT

As infants grow and develop, all of their abilities - cognitive, language, motor, social and emotional - become more sophisticated and complex. There are times in the first three years when maturation itself creates periods of unsettled behavior in children. For example, toddlers increasingly understand the effects of their actions on others as they become more aware of the peers and adults in their world. A toddler's "no" can be challenging to a caregiver who wants that child to comply, yet the toddler is demonstrating her maturity by asserting her growing independence. She is testing limits and boundaries. Learning how to support children's growing independence and at the same time provide a reasonably positive and calm experience for all children in a group can test the skills of even a seasoned provider.

Most infants and toddlers have unhappy moments, but they usually have the capacity to calm down and enjoy being with their peers. The emergence of social and emotional control depends in part on the support the child has had to master his immediate reactions to events and begin to use self-calming, thinking, and eventually communication skills as a way of coping. Some researchers see a young child's every expression of distress as an opportunity for interaction that will build relationships with an important adult which will, in turn, further extend the child's social emotional development (Robinson & Acevedo, 2001).

SCREENING AND ASSESSMENT ARE IMPORTANT

The use of valid screening and assessment procedures to identify concerns and delays early is an essential part of a system to support healthy early development. Those programs that use on-going assessment (i.e. tools to gain information about a child's strengths, needs, family resources and priorities) and screening tools are in a good position to identify social and emotional concerns effectively and early (Early Head Start National Resource Center, 2002). Early care and education providers can use curriculum-based assessments on a frequent basis to assess the developmental strengths and needs of children. On-going assessment provides specific and timely information to caregivers and parents about a child's progress and possible need for support within the program. Providers use the information to plan a program that meets children's individual needs. These assessment processes can support programs to individualize services to address the social emotional outcomes for each child

Screening tools are assessments that determine if a child's developmental skills are progressing as expected, provide information about overall child development, and indicate to caregivers and parents if a child

needs a more in-depth evaluation. Screening tools typically are used at the beginning of a program year. Providers can contribute important information to the screening process by observing children in care in multiple activities during the day. If a screening tool indicates that a child needs a more in-depth evaluation, s/he is referred to an assessment team. The results of a formal assessment process inform the daily interaction experiences as well as needed specialized services (O'Brien, 2001).

For more information about screening and assessment instruments, caregivers can go to

- http://www.abcdresources.org/Activities/IdentifyingRisk/Peer_Resources.php
- http://www.first5caspecialneeds.org/documents/IPFMHI_CompendiumofScreeningTools.pdf
- http://www.acf.hhs.gov/programs/opre/ehs/perf_measures/index.html

USE A PROGRAM PROCESS FOR UNDERSTANDING CONCERNING BEHAVIOR

When an infant's or toddler's behavior appears, over time, to be disrupting social emotional development, providers are right to be concerned. Having a program process or protocol about what to do can provide a timely, systematic and organized approach to gathering additional information about the behavior in order to make good decisions about what to do next. Such a protocol is based primarily on documented observations by the multiple staff providing services to the child and family. The protocol includes ongoing communication with parents.

Programs should develop protocols for addressing challenging behaviors (Wittmer & Petersen, 2006).

1. Maintain ongoing observation and documentation of every child
2. Assess the quality of the environment and provider-child interactions
3. Meet with the family to deepen and share understanding. Maintain ongoing communication with the family throughout the inquiry

process. Review the following questions with the staff and family members present.

- What is the child experiencing? What is the child's perspective on the situation? What strengths can be observed in the child's development or behavior patterns?
- What, when, where, how and with whom is the undesirable behavior occurring?
- What needs is the child communicating? What is the purpose of the child's behavior? What is the meaning of the child's behavior?
- What do I (we) want the child to do?
- Who are the relationships that are important to the child? Who can emotionally support the child?
- 5. Determine an individualized consistent plan for intervention
- 6. Continue observation and documentation to provide data for evaluating improvement and ensuring the consistency of the intervention
- 7. Consult with a mental health professional if the child is not responding and the persistence, frequency, and duration of the behavior is not improving (see below for a more detailed description of the role of the mental health consultant)

Determine whether further referral to community resources is necessary through discussion with family, the supervisor, and a mental health consultant (Early Head Start National Resource Center, 2006).

This protocol assumes that physical health issues have been addressed by a physician and that there is no clear physical health explanation for the child's behavior. At times, such a protocol may uncover additional health issues (e.g. frequent ear aches, vision problems) to explore as possible explanations for the observed behavior. Regardless of the etiology of the challenging behavior, the preceding questions can lead providers and families to a deeper understanding of the child's experience.

Providers' increased understanding will help them make changes in their interactions or in the environment to support the child's increasing sense of self-worth and self-control. Reflecting on the questions at times other than when the behavior is occurring permits more thoughtful and thorough consideration of the child's experience and that of his/her family. In addition, a standardized process provides a time to plan for any additional resources that will be needed to provide individualized care for the child.

UNDERSTANDING CHALLENGING BEHAVIOR - HOW TO PUT THE RESEARCH INTO PRACTICE:

- Recognize that challenging behavior is any behavior that feels overwhelming and challenges a child's or a caregiver's sense of competence.
- Evaluate the quality of the environment, curriculum, and provider-child interactions to determine if the caregiving environment is contributing to a child's challenging behavior.
- Support young children's healthy behaviors by focusing on their relationships with family members, providers, and peers. Teach the desired behavior rather than use negative commands; model appropriate behavior; and manage your own emotional reactions.
- Explore your concerns with the family and ask reflective questions to attempt to better understand what the child might be communicating through his/her behavior.
- Understand the impact of temperament and culture on both the child's and the caregiver's behavior.
- Adapt caregiving behavior based on the infant's or toddler's needs and temperament.

WHAT SHOULD CAREGIVERS DO WHEN MORE INTENSE INTERVENTIONS ARE NEEDED?

Some infants, toddlers, and their families suffer from trauma, abuse, depression, violence, and poor attachment histories without much support from the community (Emde, 2001). Providers are in a unique

position to recognize when children are in need of special help and when their ongoing behavior warrants a referral for more intense services provided within the program or in the community. For example, parents and family members who experience trauma and post traumatic stress disorder may need intense programs to repair the parent-child relationship (Appleyard & Osofsky, 2003; Schecter, Myers, Brunelli, Coates, Zeanah, Davies, et al., 2006). Programs that work with mothers who experience post-partum depression include both the mother and the infant to “foster a healthy mother–infant relationship by promoting increased maternal sensitivity, improved mother–infant interactions, acceptance of the infant, and increased maternal self-efficacy” (Nylen, Moran, Franklin, & O’Hara, 2006).

Staff members can assist one another by creating a team to discuss the behavior in question, by pooling their knowledge, providing additional observations of the child’s behavior, and supporting the caregiver in working to address the challenging behavior.

MENTAL HEALTH CONSULTANTS CAN BE HELPFUL ALL ALONG THE WAY

Early childhood providers report that more children with emotional and developmental difficulties are entering their programs each year (Yoshikawa & Knitzer, 1997) and that they do not feel equipped to deal with these special needs (Knitzer, 1996). Mental health professionals can be a valuable part of a process to reduce or avoid future behavioral problems and to enhance the capacity of providers to foster the well-being of all children served by a program. Typically, a consultant will use information drawn from observations and from parents and providers caring for identified children. In collaboration with providers, they will then begin formulating hypotheses about the meaning of behavior that is challenging (Johnston & Brinamen, 2006). Research demonstrates that

child care centers that have an ongoing relationship with a mental health consultant derive multiple benefits, including reduced child expulsion rates (Gilliam, 2005), reduced staff turnover, reduced rates of staff stress (Brennan, Bradley, Allen, Perry, & Tsega, 2005) and increased staff effectiveness in managing challenging behavior (Alkon, Ralmer, & MacLennan, 2003).

Early childhood mental health professionals may be staff members or consultants to a program. While they are valuable in responding to situations where a variety of intervention approaches have been unsuccessful, they should be consulted at the very earliest stages of concern. Recent research demonstrates that mental health professionals are most effective in assisting with challenging behavior when they are fully integrated into the regular operation of the child care program (Green, Everhart, Gordon, & Garcia Gettman, 2006; Green, Simpson, Everhart, Vale, & Gettman, 2004). However, funding limitations, a shortage of appropriately prepared professionals and/or management considerations may require that programs seek early childhood mental health consultation from sources outside the program which directly serves the child (Stark, Mann, & Fitzgerald, 2007).

Early childhood mental health consultants from an outside source are generally asked to advise programs in one of two ways. One approach focuses on a particularly challenging child and/or the child’s family. The other addresses a general program issue that impacts the mental health of staff, children, or families (Cohen & Kaufmann, 2000). The services of experienced and well trained infant and early childhood mental health professionals have the potential to offer programs help with problem solving, support for the creation of thoughtful intervention plans, coaching for practices that promote infant mental health, access to screening and assessment tools, and suggestions for additional community referrals to aid children and/or family members.

COMMUNITY PARTNERS ARE AN IMPORTANT ASSET

As professionals plan and implement a response to an infant’s or toddler’s behavior, it may be necessary to adjust the frequency or intensity of their interventions-or even rethink the strategy itself. , For example, a child may need more positive attention from teachers. However, if providers have tried several ideas with consistent efforts and the behavior is not improving - or becomes worse - the program protocol should include steps for referral to services in the community. If regular consultation from an infant and early childhood mental health consultant is not available, community partners who serve very young children and their families can assist the program and the family in providing timely responses to identified needs. These community partners might include an infant mental health program, a child care expulsion prevention service, a community mental health clinic, early intervention services, or a department of social services. Focused therapeutic work with the family may be useful, and on rare occasions, behavioral or medical interventions may be required for the very young child (Early Head Start National Resource Center, 2006).

SECURING THE INTENSIVE SERVICES THAT ARE NEEDED - PUTTING THE RESEARCH INTO PRACTICE:

- Ensure that the program has a system of quality improvement in place.
- Ensure that the program has a formal and standardized protocol or process for timely and systematic screening and assessment and intervention, or referral when there are concerns about an infant’s or toddler’s social emotional development.
- Establish on-going partnerships with a mental health consultant, community agencies, and other systems and services that can support the child’s development and provide intensive support for families.

Infant Mental Health Research Synthesis References

- Alkon, A., Ramler, M., & MacLennan, K., (2003). Evaluation of mental health consultation in child care centers. *Early Childhood Education Journal*, 31(2), 91-99.
- Appleyard, K., & Berlin, L.J. (Spring, 2007). *Supporting healthy relationships between children and their families. Lessons from attachment theory and research.* Center for Child and Family Policy, Duke University.
- Appleyard, K., & Osofsky, J.D. (2003). Parenting after trauma: Supporting parents and caregivers in the treatment of children impacted by violence. *Infant Mental Health Journal*, 24(2), 111-125.
- Brennan, E., Bradley, J., Allen, M.D., Perry, D., & Tsiga, A. (2005, March). *The evidence base for mental health consultation in early childhood settings: Research synthesis and review.* Paper presented at Establishing the Evidence Base for Early Childhood Mental Health Consultation, Tampa, FL.
- Bowlby, J. (1982). Attachment and loss: Vol. 1. *Attachment*. New York: Basic Books. (Originally published in 1969).
- Bowlby J. (1980). Attachment and loss: Vol. 1. *Loss*. New York: Basic Books.
- Cassidy, J. (1994). Emotion regulation: influences of attachment relationships. *Monographs of the Society for Research in Child Development* 59 (2-3):228-49.
- Chess, S., & Thomas, A. *Temperament. theory and practice.* New York, NY: Brunner/Mazel.
- Cohen, E., & Kaufmann, R. (2000). *Early childhood mental health consultation.* Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Cohen, J., Onunaku, N., Clothier, S., & Poppe, J. (2005). *Helping young children succeed: Strategies to promote early childhood social and emotional development.* National Conference of State Legislatures, Early Childhood Research and Policy Report.
- Cornwell, J.R., and Korteland, C. (1997). The family as a system and a context for early intervention. In K.S. Thurman, J.R. Cornwell, and S.R. Gottwald (Eds.), *Contexts of early intervention: Systems and support* (pp. 93-109). Baltimore: Paul H. Brookes.
- Conroy, S., & Marks, M.N. (2003). Maternal psychological vulnerability and early infant care in a sample of materially disadvantaged women. *Journal of reproductive and infant psychology*, 21(1).
- Cross, T., Bazron, B., Dennis, E., & Isaacs, M. (1989). *Towards a culturally competent system of care.* Vol. 1. Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center.
- Day, M., & Parlakian, R. (2004). *How culture shapes social-emotional development: Implications for practice in infant-family programs.* Washington, DC: ZERO TO THREE Press.
- Dozier, M., Peloso, E., Lindheim, O., Gordon, M. K., Manni, M., Sepulveda, S., Ackerman, J., Bernier, A., & Levine, S. (2006). Developing evidence-based interventions for foster children: An example of a randomized clinical trial with infants and toddlers. *Journal of Social Issues*, 62, 767-785.
- Early Head Start National Resource Center (2006). *Strategies for understanding and managing challenging behavior in young children: What is developmentally appropriate and what is a concern?* Technical Assistance Paper No. 10. Head Start Bureau, Administration for Children and Families, Administration on Children, Youth, and Families, U.S. Department of Health and Human Services. Washington, D.C.
- Early Head Start National Resource Center, (2002). *Developmental screening, assessment & evaluation: Key elements of individualizing curricula in EHS programs.* Technical Assistance Paper No. 4. Head Start Bureau, Administration for Children and Families, Administration on Children, Youth, and Families, U.S. Department of Health and Human Services. Washington, D.C.
- Egeland, B., & Bosquet, M. (2001). Emotion regulation in early childhood: The role of attachment-orientated interventions. In Zuckerman, B., Lieberman, A., & Fox, N. eds. *Emotional regulation and developmental health: Infancy & early childhood.* Johnson & Johnson Pediatric Roundtable Series 4; 101-109
- Egeland, B., & Erickson, M. F. (1999). Findings from the parent-child project and implications for early intervention. *Zero to Three*, 20 (2), 3-10.
- Emde, R.N. (2001). A developmental psychiatrist looks at infant mental health challenges for Early Head Start: Understanding context and overcoming avoidance. *Zero To Three*, 22, 21-24.
- Emde, R. N., & Robinson, J.L. (2000). Guiding principles for a theory of early intervention: A developmental-psychoanalytic

- perspective. *Handbook of early intervention*. Shonkoff, J. P. & Meisels, S.J., (Eds.). New York: Cambridge University Press.
- Fenichel, E. S., & Eggbeer, L. (1990). *Preparing practitioners to work with infants, toddlers, and their families: Issues and recommendations for the professions*. Washington, D.C: National Center for Clinical Infant Programs.
- Fitzgerald, H. E., & Barton, L. R., (2000). Infant mental health: Origins and emergence of an interdisciplinary field. *WAIMH handbook of infant mental health Vol.1: Historical, cultural, and international perspectives on infant mental health*. Osofsky, J. D. & Fitzgerald, H. E., (Eds.). New York: John Wiley & Sons, Inc.
- Gilkerson, L., & Shahmoon-Shanok, R., (2000). Relationships for growth: Cultivating reflective practice in infant, toddler, and preschool programs. *WAIMH handbook of infant mental health Vol. 2: Early intervention, evaluation, and assessment*. Osofsky, J.D. & Fitzgerald, H. E., (Eds.). New York: John Wiley & Sons, Inc.
- Gowen, J., & Nebrig, J., (2002). *Enhancing early emotional development: Guiding parents of young children*. Baltimore, MD: Paul Brookes, Co.
- Green, B., Everhart, M., Gordon, L., Garcia Gettman, M. (2006). Characteristics of effective mental health consultation in early childhood settings: Multilevel analysis of a national survey. *Topics in early childhood special education*, 26(3), 142-152.
- Green, B., Simpson, J., Everhart, M., Vale, E., & Gettman, M. (2004). Understanding integrated mental health services in Head Start: Staff perspectives on mental health consultation. *National Head Start Association Dialogue*, 7(1), 35-60.
- Greenough, W., Emde, R. N., Gunnar, M., Massinga, R., & Shonkoff, J. P. (2001). The impact of the caregiving environment on children's development. *Zero to Three*, 21(15), 16-23.
- Hall, E. T. (1977). *Beyond culture*. New York: Anchor Books.
- Hanson, L., Deere, D., Lee, C., Lewin, A., and Seval, C. (2001). *Key principles in providing integrated behavioral health services for young children and their families: The starting early, starting smart experience*. Washington, DC: Casey Family Programs and the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.
- Heffron, M.C. (2000) Clarifying concepts of infant mental health: Promotion, relationship-based prevention, intervention and treatment. *Infants and young children*, 12(4): 14-21
- Holmes, J. (1993). *John Bowlby & attachment theory*. London: Routledge.
- Huffman, L.C., Mehlinger, S.L., & Kerivan, A.S. (2000). Risk factors for academic and behavioral problems at the beginning of school. In *Off to a good start: Research on the risk factors for early school problems and selected federal policies affecting children's social and emotional development and their readiness for school*. Chapel Hill: University of North Carolina, FPG Child Development Center.
- Ireys, H.T., Chernoff, R., Stein, R., DeVet, K.A., and Silver, E.J. (2001). *Children's services: Social policy, research and practice*. 4(4), 203-216. Lawrence Erlbaum Associates, Inc.
- Kalyanpur, M., & Harry, B. (1999). *Culture in special education: Building reciprocal family-professional relationships*. Baltimore, MD: Paul H. Brookes.
- Kaplan-Sanoff, M. (2000). *Understanding your child's emotional health*. Paper presented at the meeting of Healthy Child Care New England, Brewster, MA.
- Kelly, J. F., Zuckerman, T. G., Sandoval, D., & Buehlmen, K. (2003). *Promoting first relationships*. Seattle, WA., NCAST-AVENUE Publications.
- Lerner, C., & Dombro, A.L. (2005). *Bringing up infant: Three steps to making good decisions in your child's first three years*. Washington, D. C.: ZERO TO THREE Press.
- Lieberman, A.F. (1993). *Emotional life of the toddler*. New York, New York: The Free Press.
- McDonough, S. (2000). Interaction guidance: An approach for difficult to engage families. In C.H. Zeanah (Ed.), *Handbook of infant mental health* (pp. 485-493). New York: Guilford Press.
- Michigan Association for Infant Mental Health, (2002). *MI-AIMH endorsement for culturally sensitive, relationship-focused practice promoting infant mental health*. Southgate, MI.
- National Research Council and Institute of Medicine (2000). *From neurons to neighborhoods: The science of early childhood development*. Shonkoff, J. P. & Phillips, D. A., (Eds.), Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education, Washington, D.C.: National Academy Press.
- National Scientific Council on the Developing Child. *Children's emotional development is built into the architecture of their brain*. Working paper No.2, Winter 2004
- NICHD Early Childhood Research Network (2000). Characteristics and quality of child care for toddlers and preschoolers. *Applied developmental science*, 4(3), 116-135.

- Nylen, K.J., Moran, T.E., Franklin, C.L., & O'Hara, M.W. (2006). Maternal depression: A review of relevant treatment approaches for mothers and infants. *Infant mental health journal*, 27(4), 327-343.
- O'Brien, J. (2001). *How screening and assessment practices support quality disabilities services in Head Start*. Head Start Bulletin: Enhancing Head Start Communication, #70., Head Start Bureau, Administration for Children and Families, Administration on Children, Youth, and Families, U.S. Department of Health and Human Services. Washington, D.C.
- Olson, S.L., Bates, J.E., & Sandy, J.M. (2003). Toddler temperament, cognition, and caregiver interaction predict impulsive functioning. *Evidence-based mental health*, 6(1), 20.
- Parlakian, R., & Seibel, N. L. (2002). *Building strong foundations: Practical guidance for promoting the social-emotional development of infants and toddlers*. Washington, D.C.: ZERO TO THREE Press.
- Parlakian, R., & Seibel, N. L. (2001). *Being in charge: Reflective leadership in programs*. Washington, D.C.: ZERO TO THREE Press..
- Pawl, J., & Dombro, A. (2001). *Learning & growing together with families: Partnering with parents to support young children's development*. Washington, D.C.: ZERO TO THREE.
- Robinson, J., & Acevedo, M. C. (2001). Infant reactivity and reliance on mother during emotional challenges: Prediction of cognition and language skills in a low-income sample. *Child development* 72(2), 402-426.
- Schechter, D.S., Myers, M.M., Brunelli, S.A., Coates, S.W., Zeanah, C.H., Davies, M., Grienemberger, J.F., Marshall, R.D., McCaw, J.E., Trabka, K.A., & Liebowitz, M.R. (2006). Traumatized mothers can change their minds about their toddlers: Understanding how a novel use of videofeedback supports positive change of maternal attributions. *Infant mental health journal*, 27(5), 429-447.
- Scroufe, L. A. (1996). *Emotional development: The organization of emotional life in the early years*. New York: Cambridge University Press.
- Seibel, N. L., Britt, D., Gillespie, L.G., & Parlakian, R. (2006). *Preventing child abuse and neglect: Parent-provider partnerships in child care*. Washington, D.C., ZERO TO THREE Press.
- Stark, D.R., Mann, T.L., & Fitzgerald, H.E. Looking ahead. *Infant mental health journal*, 28 (2), 255-258.
- Trawick-Smith, J. (2003). *Early childhood development: A multicultural perspective*. Upper Saddle River, NJ: Merrill/Prentice Hall.
- Tronick, E. Z. (1989). Emotions and emotional communication in infants. *American psychologist*, 44 (2), 112-119.
- Van IJzendoorn, M.H. (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the adult attachment interview. *Psychological bulletin*, 117, 387-403.
- Volling, B. (2001). Early attachment relationships as predictors of preschool children's emotion regulation with a distressed sibling. *Early education and development*, 12: 185-207
- Winnicott, D. W. (1987). *The child, the family, and the outside world*. Reading, MA: Addison-Wesley (Originally published 1964).
- Wittmer, D. S., & Petersen, S. H., (2006). *Infant and toddler development and responsive program planning: A relationship-based approach*. Upper Saddle River, N. J.: Pearson Merrill Prentice-Hall.
- Zeanah, P., Stafford, B., & Zeanah, C. (2005). *Clinical interventions to enhance mental health: A selective review*. National Center for Infant and Early Childhood Health Policy at UCLA. Retrieved November 7, 2007 from
- Zeanah, P., Stafford, B., Nagle, G., & Rice, T., (2005). *Addressing social-emotional development and infant mental health in early childhood systems*. Los Angeles, CA: National Center for Infant and Early Childhood Health Policy. Building State Early Childhood Comprehensive Systems Series, No. 12.
- Zeanah, C.H., & Zeanah, P.D., (2001). Towards a definition of infant mental health. *Zero to Three*. 22(1), 13-20.
- ZERO TO THREE (2001). *Infant Mental Health Task Force: Definition of infant mental health*. Retrieved February 20, 2007 from <http://www.zerotothree.org/imh>.